

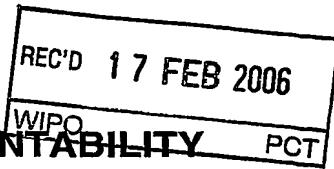
PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



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|---|--|--|
| Applicant's or agent's file reference 758.1636WOU1 | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/US2004/037570 | International filing date (day/month/year) 10.11.2004 | Priority date (day/month/year) 12.11.2003 |
| International Patent Classification (IPC) or national classification and IPC B01D46/52 | | |
| Applicant DONALDSON COMPANY, INC. et al. | | |

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| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> <i>(sent to the applicant and to the International Bureau) a total of sheets, as follows:</i></p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> <i>(sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</i></p> |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> |

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| Date of submission of the demand 09.09.2005 | Date of completion of this report 16.02.2006 |
| Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer de Biasio, A Telephone No. +49 89 2399-8627 |



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/US2004/037570

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
 - This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
 - international search (under Rules 12.3 and 23.1(b))
 - publication of the international application (under Rule 12.4)
 - international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-31 as originally filed

Claims, Numbers

1-22 filed with telefax on 09.09.2005

Drawings, Sheets

1/28-28/28 as originally filed

- a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. The amendments have resulted in the cancellation of:
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):
4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
 - the description, pages
 - the claims, Nos.
 - the drawings, sheets/figs
 - the sequence listing (*specify*):
 - any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/US2004/037570

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

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|-------------------------------|-------------|-------|
| Novelty (N) | Yes: Claims | 1-22 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 11-22 |
| | No: Claims | 1-10 |
| Industrial applicability (IA) | Yes: Claims | 1-22 |
| | No: Claims | |

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

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Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Preliminary Remarks under Art. 6 PCT

1.1 The independent claims 1, 11 and 18 do not appear to include the same corresponding essential features. For both method claims 11 and 18 it is essential that the air cleaner comprises a pivot region to pivot the filter element either from or into its sealing engagement in the housing. Claim 1 does not mention any pivot region. However, from the description it appears to be essential for the filter element to pivot (or tilt or cam or rock) about a pivot region. An air cleaner with a filter element engaged in the bump-out region not having the possibility of pivoting into sealing engagement with the housing should not be able to solve the problem of the present application, i.e. essential feature are missing in claim 1.

Dependent claims 2-10 do not mention the pivot region either. Only in claim 7 the filter element is said to be cammed into sealing engagement. Claim 7, however, does not mention that said camming should be possible when the filter element is engaged in the bump out region. To conclude, none of device claims 1-10 comprises the essential feature discussed here above.

1.2 For the device of claim 1 it is essential for the bump out region to be wedge-shaped (cf feature (a) of claim 1). A corresponding feature is missing in claim 11 and in claim 18. It is only introduced in dependent method claim 13.

1.3 For the method of claim 18 it is essential that a sidewall of the housing defines a ramp. A ramp is however only mentioned in dependent device claim 3, not in independent device claim 1. Also method claim 11 is silent on a ramp in the sidewall of the housing.

2. Comments on Art. 33(2) PCT and Art. 33(3) PCT

2.1 None of the prior art documents cited in the search report or in the present application appears to disclose an air cleaner with a bump out region as mentioned in present independent claims 1, 11 and 18. Their subject-matter should thus be new (Art. 33(2) PCT).

2.2 Taking into consideration the above remark under Art. 6 (cf item 1.1), the device of claims 1-10 seems however to be missing essential features enabling it to solve to problem of the present application. The problem not being solved, no inventive

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step can be acknowledged (Art. 33(3) PCT).

Said objection does not apply to the methods of claims 1 and 18 as these mention *inter alia* a pivot region. An inventive step should be recognized (Art. 33(3) PCT).

Re Item VII

Certain defects in the international application

1. As only the embodiment of figures 30-43 disclose an air filter having a housing with a bump out region, only the corresponding part of the description relates to the subject-matter of the claims. The description is not adapted to the claims (Rule 5 PCT),
2. The claims are not provided with reference signs between parentheses (Rule 6.2(b) PCT).
3. WO-03/095068, by the applicants themselves and published after the priority date of the present application, appears to represent the most relevant prior art document and should be cited in the description (Rule 5.1(a)(ii) PCT).